

**FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Telecommunications Relay Services and) CG Docket No. 03-123
Speech-to-Speech Services for)
Individuals with Hearing and Speech)
Disabilities)
)
Structure and Practices of the Video Relay) CG Docket No. 10-51
Service Program)

**Interstate Telecommunications Relay Services Fund
Payment Formula and Fund Size Estimate**

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May 3, 2021

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**Payment Formula and Fund Size Estimate
Interstate Telecommunications Relay Services (TRS) Fund
For July 2021 through June 2022**

I. Introduction

Rolka Loube Saltzer Associates LLC dba Rolka Loube (RL), as Interstate Telecommunications Relay Services (TRS) Fund Administrator (the Administrator), herein submits proposed compensation rates, demand projections, projected fund size and proposed carrier contribution factors for the period July 1, 2021, through June 30, 2022, in accordance with section 64.604 of the Federal Communications Commission’s (FCC or Commission) rules.¹

The Administrator projects a net fund cash requirement for fund year 2021-2022 of \$1,324,674,049. The net fund cash requirement is the product of rates calculated consistent with Commission Orders and Rules; demand projections for each supported service; administrative overheads; and a budgetary reserve less the projected prior year

¹ 47 C.F.R. §64.604 (c)(5)(iii)(H).

fund balance. The projected contribution factor supporting IP CTS is 0.00830 based on the IP CTS revenue requirements divided by estimated interstate and intrastate end-user revenue. The projected contribution factor for all other fund requirements is 0.01330 based on the balance of the TRS Fund revenue requirement divided by the estimated interstate end-user revenue.

In accordance with the Commission's 2007 *Cost Recovery Order*,² the Administrator has used the Multi-state Average Rate Structure (MARS) methodology, based on the weighted average of competitively bid state rates, to propose compensation rates for interstate Traditional Relay Service (TRS) (\$4.1944 per minute), interstate Speech-to-Speech (STS) (\$5.3254 per minute), and interstate Captioned Telephone Service (CTS) (\$2.3662 per minute).³

The IP Relay compensation rate is subject to a price-cap-like methodology as further described in the 2019-2020 Rate Order. The Commission has adjusted the price-cap methodology by adopting a series of waivers. As discussed below, Rolka Loube is recommending retaining the current rate (\$1.7146 per minute).⁴

In the 2020 IP CTS Report and Order, the Commission continued the glide path toward setting the IP CTS rate on the basis of the average industry cost per-minute. The Order reduced the IP CTS rate for the remainder of the 2020-2021 fund year to \$1.42, and further reduced that rate to \$1.30 for the 2021-2022 fund year.⁵

Per the 2017 *Report and Order and Order*,⁶ the Commission adopted a tiered Video Relay Service (VRS) rate structure for the next four years (until June 30, 2021). To date, the Commission has not adopted a VRS rate structure for the 2021-2022 fund

² Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Report and Order and Declaratory Ruling, 22 FCC Rcd. 20140 (2007) (Cost Recovery Order).

³ Only the interstate costs of these services, which are offered through state relay programs, are supported by the TRS Fund. Currently, IP CTS, Internet Protocol Relay services and Video Relay Services are not offered through state relay programs and are funded solely through the TRS Fund.

⁴ See Order, CG Docket No. 03-123 and CG Docket No. 10-51, rel. June 28, 2019 at paragraphs 8-20.

⁵ IP CTS Report and Order, Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 20-132, ("2020 IP CTS Report and Order"), ¶ 11.

⁶ See FCC 17-86 rel. July 6, 2017.

year. For the purposes of determining the fund size and the contribution factor, Rolka Loube has assumed that the current VRS rates and tiers will remain in place during the 2021-2022 fund year.

A Commission *Report and Order*⁷ amended the contribution rule to provide that TRS Fund contributions for the support of IP CTS shall be calculated based on the total interstate and intrastate end-user revenues of each telecommunications carrier and VoIP service provider beginning with the 2020-2021 program year.⁸ The total contributions needed to support the TRS Fund are not affected; therefore, two contribution factors are calculated and included: (1) to support IP CTS requirements and (2) to support the traditionally calculated factor for all other service requirements. The Commission required a separate contribution factor for IP CTS that is applied to all the end-user revenues for each TRS Fund contributor. As the first step in implementing the approach, the Administrator is directed to determine an IP CTS revenue requirement, based on the applicable IP CTS compensation rate(s) and projected demand. The IP CTS revenue requirement shall also include the portion of the TRS Fund reserve that is attributable to IP CTS. Next, based on the total intrastate and interstate end-user revenue data reported by TRS Fund contributors on Forms 499-A, the Administrator shall compute a separate TRS Fund contribution factor for IP CTS, by dividing the IP CTS revenue requirement by contributors' total intrastate and interstate end-user revenues. Calendar year 2020 end-user revenues, estimated by the Data Collection Agent (DCA), were still being gathered and compiled from reporting entities when this recommendation was prepared for submission. The revenue estimate contains placeholders for reports which are not deemed late until after the due date of May 1 for this Annual Report. We recommend, as we have in prior years, that the Commission use the current best available 499-A information from the DCA to recalculate the contribution factors when it becomes available, prior to adoption of an Order for the upcoming program year. Our current recommendation has been calculated using the latest information available at the time of this submission. According to the best available estimate, the annual interstate

⁷ See Report and Order, CG Docket No. 13-24 and CG Docket No. 03-123, released November 25, 2019.

⁸ See Public Notice of Effective Date rel. January 10, 2020 identifying the effective date of the rule change to be February 5, 2020.

contribution base for 2021-22 is \$41,382,719,812, which is approximately 8.6% below the level used for the current program year. And, the estimated intrastate and interstate end-user services revenue contribution base for 2021-22 is \$93,267,287,880. The contribution factors for the 2021-2022 fund year, derived from the corresponding ratio of estimated fund size requirements to prior calendar year revenues, are proposed to be 0.01330 for interstate contributors, to fund all services except IP CTS and 0.00830 for interstate and intrastate contributors to fund IP CTS. Upon approval by the Commission, the Administrator will begin billing carriers for the 2021-2022 funding period in July 2021.

II. Interstate TRS Fund Overview

The Interstate TRS Fund (TRS Fund/fund) is designed to compensate eligible relay service providers⁹ for the reasonable costs of furnishing “[t]elephone transmission services that provide the ability for an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability to engage in communication by wire or radio with one or more individuals in a manner that is functionally equivalent to the ability of a hearing individual who does not have a hearing or speech disability to communicate using voice communications services by wire or radio.”¹⁰

Services that are currently compensated from the TRS Fund include interstate traditional Telecommunications Relay Service (TRS), interstate Captioned Telephone Service (CTS), interstate Speech-To-Speech relay service (STS), Video Relay Service (VRS), Internet Protocol (IP) Relay service, and Internet Protocol Captioned Telephone Service (IP CTS). The Administrator reimburses providers at compensation rates computed by the Administrator in accordance with Commission rules and approved or

⁹ Eligible providers are TRS providers operating under contract with state TRS programs and Internet-based TRS providers certified by the Commission pursuant to 47 C.F.R. § 64.606.

¹⁰ 47 U.S.C. § 225(a)(3).

modified by the Commission. In 2007, the Commission's *Cost Recovery Order* adopted methodologies for establishing the reimbursement rates for the various relay services.¹¹

This Annual Report reflects the allowable costs and demand reported by VRS, IP Relay and IP CTS service providers for calendar years 2019 and 2020, as well as any amounts projected for 2021 and 2022. The provider projections for calendar years 2021 and 2022 were made without full information about when restrictions occasioned by the COVID-19 pandemic might end, and how TRS costs and demand might change thereafter, despite some evidence that a return to more predictable levels of service may be in progress. As the Administrator, RL has invited service providers to report material changes to their annual cost and demand projections and will continue to monitor those provider reports of cost and demand changes which may materially impact costs or demand projections supporting the Order and contribution factors adopted in this proceeding for the 2021-2022 fund year.

In 2020, presumably due to the COVID-19 pandemic, demand for TRS proved to be higher than providers had projected at the beginning of the year. In mid-March 2020, the Commission recognized that due to widespread public concern about the spread of the coronavirus (COVID-19), as well as school closings and other measures recently taken by various state and local authorities, TRS providers were experiencing a sharp increase in traffic levels, and simultaneously, a sharp reduction in the number of communications assistants (CAs) able to work at TRS call centers. The Commission on its own motion granted temporary waivers¹² of certain requirements under sections 64.604 and 64.606 of the Commission's rules to ensure the uninterrupted availability of TRS in the United States during this public health emergency. The reported demand for IP-based services in March 2020 spiked above the projected 2019-2020 monthly levels. The level of demand

¹¹ The methodologies included price caps for IP Relay and a tiered rate structure for VRS. The Commission set IP Relay and VRS rates for a period of 3 years and confirmed that the initial year for the applicability of the rates was the 2007-2008 fund year. The initial three year period for the IP Relay and VRS methodologies sunset as of June 30, 2010. See *Cost Recovery Order* ¶¶ 97, 107-108. In the *2010 Rate Order* the Commission initiated a new 3-year cycle for IP Relay rates and adopted interim, one-year rates for VRS, to be effective while the Commission considered broad reform. In the *2013 Rate Order* the Commission initiated another 3-year cycle for IP Relay rates. In the 2013 VRS Reform Order the Commission established new VRS tiers and set rates in six month increments through June 2017.

¹² See CG Docket Nos. 03-123 and 10-51 Rel. March 16, 2020, DA 20-281.

for VRS and IP CTS experienced by the service providers for the second half of March ranged from 25% to 33% above recently experienced levels. Because some pandemic-related restrictions remain in effect, there continues to be some uncertainty regarding projections of demand for the current year. Therefore, in order to ensure that the TRS Fund is sufficient for the upcoming program year, the Administrator is recommending that the levels of projected demand, which were increased by an additional twenty five percent (25%) when calculating requirements and contribution factors for Fund Year 2020-2021, be adjusted to be 10% above the levels projected by the service providers for both IP CTS and VRS services, when calculating fund requirements and contribution factors for Fund Year 2021-2022. IP Relay service demand has remained remarkably stable throughout the program year and therefore we are not recommending an adjustment to the provider projected IP Relay demand level for fund requirements or contribution factor.

The Commission's shared funding mechanism for the TRS Fund ensures that the costs of meeting relay service obligations are borne equitably. Contributors support the TRS Fund based on their relative share of intrastate, VoIP, interstate and international end-user revenues.¹³ The TRS funding period begins on July 1st and ends June 30th of the following calendar year. For the July 2021 to June 2022 fund year, the Administrator has used the carriers' estimated 2020 end-user revenues¹⁴ as the basis for calculating carriers' contribution obligations. The interstate and international contribution base has become smaller each year and the reductions to the contribution base are shown in the following Table 1. RL anticipates an 8.6% reduction in the interstate contribution base for the program year beginning July 1, 2021, for a contribution base of \$41,382,719,812. RL anticipates a decline in combined intrastate and interstate end-user revenues contribution base of 11.9% from \$105,871,186,947 to \$93,247,287,880 for the program year 2021-2022.

¹³ See 47 C.F.R. §64.604(c)(5)(iii)(A)-(C).

¹⁴ Revenues are reported on the Telecommunications Reporting Worksheet, FCC Form 499-A, on April 1, 2021, and provided to the Administrator by the Universal Service Administrative Company (USAC), the Revenue Data Collection Agent (DCA). At the time of preparation of this filing, the information from the DCA is considered preliminary, and updated data will be used for the calculation of carrier contributions.

Table 1: DCA Reported Contribution Base

Program Year beginning	Interstate Contribution Base	Interstate and Intrastate Contribution Base
2004	\$ 81,954,191,761	
2005	\$ 80,666,621,324	
2006	\$ 80,457,972,602	
2007	\$ 77,898,078,806	
2008	\$ 79,428,092,243	
2009	\$ 78,895,806,171	
2010	\$ 72,844,997,816	
2011	\$ 69,450,220,823	
2012	\$ 67,206,226,973	
2013	\$ 67,278,109,560	
2014	\$ 65,234,609,107	
2015	\$ 64,129,341,109	
2016	\$ 61,424,575,348	
2017	\$ 58,034,785,511	
2018	\$ 53,380,042,779	
2019	\$ 50,876,678,778	
2020	\$ 45,263,218,059	\$105,871,186,947.87
2021	\$ 41,382,719,812	\$ 93,247,287,880

The DCA also provides updates to the data reported by carriers throughout the program year to reflect a variety of changed contributor circumstances, such as gone out of business, no telecommunications revenues, bankruptcies, mergers and acquisitions. The contribution base changes from year to year, and changes over the course of the program year. Changes to the contribution base reported to the Administrator by the DCA during the program year have reduced the available funding level by approximately \$2 million. This erosion of funding is one of the factors considered in recommending a two-month budgetary reserve allowance, however the erosion of funding has not been a specific item included in the net funding requirements.

The DCA provides the Administrator with the FCC Form 499-A carrier revenue information used to calculate the contribution factor and maintains the carrier database for all funds. Revisions to FCC Form 499-A revenue data are provided by the DCA to the Administrator and other program managers so that corrections may be made to carrier

billing. Revisions may be telecommunications service provider initiated or may be the result of an audit. The first edition of the reported 2021 499-A submissions is provided to the Administrator on or about April 20th. Each subsequent month, the DCA will provide updated information including information received from contributors that did not file by April 1st. During the first several months of the program year, there are substantial adjustments to the contribution base derived from the first edition of the reported 2021 499-A submissions. The Administrator anticipates submitting an updated contribution factor recommendation to the Commission for consideration in response to the Public Notice regarding this submission.

Upon approval of the contribution factors by the Commission, the Administrator will promptly bill carriers for the 2021-2022 funding period which begins July 1, 2021. Annual contributions will be due within 28 days after their July invoice date. Carriers whose contributions are \$1,200 or more have the option to be invoiced in twelve equal monthly installments. Invoices will be due four weeks after the issue date of the monthly invoice. RL has assigned each monthly contributor to one of three monthly invoice cycles and issues approximately one third of the monthly invoices on the first three Fridays of each month.

RL expects to begin issuing invoices for the 2021-2022 program year on or about Friday, July 16, 2021. Receipts associated with those invoices will begin to arrive in mid-August. This lag in the receipt of revenues is not currently recognized as significant because there has not been a material change in the yield of the contribution factor great enough to impact cash flow associated with the final billing cycles.

Per-minute compensation rates will be effective for minutes of service beginning July 1st, at the rates approved by the Commission. Although the Administrator generally has been able to process requests for compensation submissions in less than 30 days, provider reimbursement requests must be processed within sixty (60) days.¹⁵ For example, minutes handled by providers in May 2021 are expected to be reported between June 10 and 15, 2021, and providers will then receive compensation for those minutes at

¹⁵ See 47 C.F.R. 64.604(C)(5)(iii)(L).

the rates in effect at the time service was provided, on or about July 9, 2021. This lag between the provision of services and the issuance of payments is reflected in the demand and cash flow projections and forms the basis of the recommended TRS Fund reserve requirements.

III. TRS Rate Development

A. MARS

The *Cost Recovery Order* adopted the Multi-state Average Rate Structure (MARS) plan as the basis for calculating the compensation rate for interstate Traditional Relay Service (TRS), interstate Speech-To-Speech (STS), and interstate Captioned Telephone Service (CTS).¹⁶ Each year, the Administrator will calculate a MARS rate for interstate TRS, STS, and CTS, based on the weighted average of state rates. TRS and STS are calculated on a combined basis, whereas CTS is calculated separately.¹⁷

The Commission identified the steps to be used by the Administrator to determine MARS-based compensation rates.¹⁸ The Administrator must first collect intrastate traditional TRS, STS, and CTS compensation rate data for the prior calendar year. Accordingly, the Administrator requested the following information from each state TRS administrator, and each provider, of interstate traditional TRS, STS and CTS for calendar year 2020 in January 2021, and requested that it be provided no later than the end of February 2021:¹⁹

- a. the per-minute compensation rate for intrastate TRS and STS
- b. the per-minute compensation rate for intrastate CTS
- c. whether the rate applies to session or conversation minutes
- d. the number of intrastate session minutes for TRS and STS
- e. the number of intrastate session minutes for CTS
- f. the number of intrastate conversation minutes for TRS and STS
- g. the number of intrastate conversation minutes for CTS

¹⁶ Cost Recovery Order at ¶ 16.

¹⁷ *Id.*

¹⁸ Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123; Structure and Practices of the Video Relay Service Program, CG Docket No. 10-51, FCC 11-104, Rel. June 30, 2011 at ¶¶ 9-18.

¹⁹ The Annual Data Collection Form is included at Appendix A.

- h. any amounts paid by the state to the provider for relay service during the previous calendar year that are not included in the contractual per-minute compensation rate.

The Administrator determines whether there are anomalies in any state's data that necessitate it being excluded from the MARS calculation;²⁰ calculates each state's total dollars paid for the year for intrastate traditional TRS and STS services; and calculates the final rate by dividing the total dollars paid by all states by the total conversation minutes of all states for TRS and STS. The process is repeated for CTS.

B. Traditional TRS and STS Formula Development

Fifteen state jurisdictions²¹ provide service based on a flat rate for the service rather than on a per-minute rate, due to the small volume of minutes for the services in those jurisdictions. Costs recovered on a flat rate basis are included in the MARS calculation along with the per-minute revenues. The conversation minutes of flat rate states have been included in the calculation. For the remaining states and the District of Columbia, the Administrator multiplied each jurisdiction's TRS and STS rate by the corresponding number of intrastate session minutes or intrastate conversation minutes, whichever the jurisdiction's rate was based upon.²² For those states experiencing a mid-year rate change, the calculation was performed for each rate and corresponding service period minutes. The calculation was made for each jurisdiction and the resulting weighted dollar amounts were summed to produce a total dollar amount for each service. If additional amounts paid by a state to the relay service provider(s) during the applicable period were not included in the contractual per-minute compensation rate, but were applicable to the provision of relay service, those amounts were added to the weighted dollar total by the Administrator.²³ As a final step, the Administrator divided the resulting total weighted dollar and supplemental payment amount by the total number of

²⁰ For example, if there were no state TRS Fund and the cost of providing Relay services were recovered by the service provider based on each LEC's proportionate share of subscriber lines in the state, MARS-like data would not be available and thus, would be excluded from the MARS computation.

²¹ Arizona, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maine, New Hampshire, North Carolina, North Dakota, Puerto Rico, Rhode Island, South Carolina, Texas and the Virgin Islands.

²² Cost Recovery Order at ¶ 30.

²³ *Id.* at ¶ 31.

intrastate TRS and STS conversation minutes.²⁴ The results of this calculation can be found in Exhibit 1-1, which displays the array of rates reported by the individual state jurisdictions in ascending rate order. It does not identify the states in deference to provider requests for confidentiality.

RL hereby renews its recommendation that the Commission authorize future reports to identify the rates and demand by state, unless the reporting state asserts a claim of confidentiality regarding its compensation rates. Only two providers currently provide state services reflected in the MARS calculations.

The total dollar amount paid out for intrastate TRS and STS during calendar year 2020 amounted to \$18,326,434.96. The total conversation minutes for intrastate TRS and STS for calendar year 2020 were 4,369,212. The proposed compensation rate is developed by dividing the total 2020 intrastate dollar amount by the total 2020 intrastate conversation minutes, resulting in a proposed MARS rate of \$4.1944 per conversation minute for interstate traditional TRS for the 2021-2022 funding period. The proposed rate is approximately 12% above the 2020-2021 MARS rate of \$3.7526 per conversation minute.

In the *Cost Recovery Order*, the Commission added an additional amount of \$1.131 to the 2007-2008 interstate STS compensation rate to be used by the providers for outreach efforts.²⁵ In the ensuing fund years, the Commission has found it appropriate to continue the outreach additive at the same level.

The Administrator continues to recommend adding the \$1.131 to the MARS-based STS rate resulting in a total proposed STS rate of \$5.3254 per minute; an increase of 9% from the \$4.8839 per-minute rate for the 2020-2021 fund year.²⁶ However, the Administrator notes that the demand for STS continues to be small compared to the other services. The outreach additive, projected to be less than \$200,000 ($\$1.131 \times 136,752$

²⁴ *Id.*

²⁵ *Id.* at ¶¶ 57, 61.

²⁶ At its April 2021 meeting, the Interstate TRS Advisory Council was informed of the Administrator's intent to recommend that \$1.131 per minute of extra funding for speech to speech outreach purposes be maintained.

minutes = \$154,666) across the two service providers when applied to the per-minute rate, may not be having the desired result. The Administrator lacks adequate information to determine if this community is being adequately served or to determine the underlying cause of the continued reduction in the volume of this service.

C. CTS Formula Development

The proposed MARS CTS rate was calculated by following the same steps described above but substituting CTS related data for the TRS and STS data. The results of this calculation can be found in Exhibit 1-2. Exhibit 1-2 summarizes the data provided by the individual state jurisdictions.

The total dollars for intrastate CTS, including the amounts paid to relay providers not included in the compensation rate, declined 8% from \$ 22,211,655 for calendar year 2019 to \$20,369,910 for calendar year 2020. The total conversation minutes for intrastate CTS also declined 10% from 9,593,579 for calendar year 2019 to 8,608,773 for calendar year 2020. The total 2020 intrastate dollars divided by 2020 intrastate CTS minutes equals a calculated compensation rate of \$2.3662 per conversation minute for interstate CTS for the 2021 – 2022 funding period.

The proposed MARS CTS rate represents a 2% increase from the 2020–2021 rate of \$2.3153. The associated fund revenue requirement at this reimbursement rate level will be \$5,488,781 in program year 2021-2022, a decrease of \$1,152,509 (\$5,488,781 - \$6,641,290 = -\$1,152,509) from the amount projected for the program year ending June 30, 2021.

D. IP CTS Formula Development

The RL 2020 Annual Data Collection Form requested historical cost data regarding the provision of IP CTS in calendar years 2019 and 2020 as well as projected costs for 2021 and 2022 based on the cost categories reported by service providers for IP based services and for VRS services. The results of analysis of that IP CTS data are found in Exhibit 1-3. Exhibit 1-3 contains information compiled by the Administrator from annual cost data supplied by IP CTS service providers for the annual periods 2016 through 2020, as well as the current projected costs for both 2021 and 2022. This Exhibit demonstrates that the average cost of IP CTS providers continues to decrease. IP CTS expenses plus a 10 percent operating margin declined from \$1.3548 in 2017 to \$1.1010 in 2020. The projected 2021 and 2022 costs include a minor uptick in costs to between \$1.11 and \$1.12, mostly associated with an increase in indirect expenses.²⁷ Based on the number of reported minutes of service, IP CTS continues to be the most popular TRS service. In the *IP CTS Modernization and Reform Order*, the Commission eliminated the use of MARS to calculate IP CTS rates and adopted interim rates for the provision of IP CTS, effective from July 1, 2018, through June 30, 2020. For the period July 1, 2019, through June 30, 2020, the interim rate established by the Commission was \$1.58. In the *2020 IP CTS Report and Order*, the Commission retained its determination that the IP CTS rate should be based on average industry cost including an operating margin. The Commission continued on its rate glide path by immediately lowering the \$1.58 rate to \$1.42 and establishing a rate of \$1.30 for the 2021-2022 fund year.

In the past, the Commission has raised concerns about the extent to which projected costs provide a reliable basis for setting TRS compensation rates. In the VRS context, the Commission has often resolved this issue by using a weighted average of providers' historical and projected per-minute costs to set compensation rates. The

²⁷ Indirect expenses include: Finance, Accounting, Legal, Regulatory, Engineering, Research and Development, Operations Support, Human Resources, Billing, Contract Management, Risk Management and Other Corporate Overhead expenses.

Commission recently found this blended approach to be a reasonably accurate predictor of actual VRS costs and followed this approach in setting interim IP CTS rates.²⁸

The average cost for IP CTS, based on provider-projected costs for 2021 and 2022, plus a 10% operating margin, is approximately \$1.1067.²⁹ The reported average cost continues to decline in every category. The reported costs of the highest cost providers also continued to decline. The average projected costs however indicate a reversal of the decreasing average costs due to increasing projected expenditures in all categories except depreciation and “other.” The increase in projected costs increases the value of the operating margin.

The category “other” includes primarily sub-contracted services and license fees. The Commission has directed the service providers to submit detailed allocations of subcontractors’ costs. The additional information recently submitted to Rolka Loube is incomplete and of limited use. Rolka Loube has not included information from those submissions in the exhibits attached to this report. We note that in the absence of a breakdown, we have no sound basis to determine that subcontractor costs are reasonable.

The rate of \$1.30 adopted by the Commission for the 2020-2021 fund year is not only above the average provider cost of \$1.1067 for the years 2020 and 2021 but it is also above the average projected provider cost plus the operating margin of \$1.1169 for the 2021-2022 fund year.

E. IP Relay Formula Development

[Due to the single provider offering service cost information has been redacted from this recommendation.]

The Commission adopted a cost recovery methodology for IP Relay based on a price-cap-like methodology, effective for the 2019-2020 fund year, beginning a new three-year rate cycle. The resulting 2019-2020 rate of \$1.67 per minute included an

²⁸ See FCC 18-79 Rel. June 8, 2018 at para. 23.

²⁹ See Exhibit 1-3.

allowance for costs of outreach efforts necessary to reach consumers who are deafblind³⁰ as well as a number of adjustments to the rate calculation to align IP Relay rate setting with recent Commission precedent and address gaps in the national outreach program. The Commission adjusted the rate to \$1.7146 for the 2020-2021 fund year.³¹

Operating Margin. To harmonize the setting of an IP Relay compensation rate with recent Commission policy determinations on TRS compensation, the Commission replaced the allowed rate of return on capital investment with an allowed operating margin, which permits recovery of a designated percentage of average expenses, as a supplement to recovery of average expenses within the same zone of reasonableness established for VRS, a range between 7.6% and 12.35% and designated the high end of the range for use in making the rate calculation.

Research and Development. The Commission also concluded that the research and development costs described in Sprint's 2019 waiver request are allowable expenses that may be recovered without the necessity of a waiver.

Cost Averaging. Also consistent with recent Commission policy determinations regarding other forms of TRS, in setting a new base compensation rate for IP Relay the Commission relied on a cost calculation that averaged Sprint's projected costs for 2020 with its historical costs reported for 2019.³² The Commission denied Sprint's waiver request to use the average of two projected years rather than the average of one projected year and one historical year.³³

³⁰ To enable such outreach, the Bureau granted a limited waiver of the rule disallowing TRS Fund compensation for IP Relay outreach costs. *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 10-51 and 03-123, Order, 31 FCC Rcd 7246, 7250-52, paras. 13-20 (CGB 2016) (*2016 TRS Rate Order*).

³¹ 2020 TRS Rate Order, DA 20-692, Para 19.

³² The Commission recently affirmed the use of this blended approach for setting VRS compensation rates, and it also followed this approach in setting interim compensation for IP CTS providers. *See 2017 VRS Rate Order*, 32 FCC Rcd at 5928-29, para. 69; *2018 IP CTS Modernization and Reform Order*, 33 FCC Rcd at 5813, para. 23. The Commission has found that using an average of projected costs for the calendar year in which a rate is established (in this case 2019) and historical costs for the preceding calendar year (in this case 2018) is a reasonably accurate predictor of actual costs incurred for the Fund Year. *2017 VRS Rate Order*, 32 FCC Rcd at 5928-29, para. 69.

³³ 2020 TRS Rate Order, Para 10.

Outreach to the DeafBlind Community. The Commission renewed for one year the partial waiver of the Commission's prohibition on outreach cost recovery, which was initially granted in 2016, and renewed in 2017, 2018 and again in 2019, to permit recovery of costs for specific IP Relay outreach efforts to meet the TRS needs of people who are deafblind.³⁴

Other Outreach Expenses. The Commission also found that special circumstances warrant a limited waiver of the prohibition against compensation for IP Relay outreach costs. This waiver (1) will serve the public interest by enabling outreach to potential IP Relay users not currently being reached by the National Outreach Program; and (2) will not undermine the policy underlying the rule because Sprint, as the sole provider of IP Relay service, has little incentive to divert outreach funds to branded marketing.

Indirect Overhead. The Commission continued to deny Sprint's waiver request regarding indirect overhead costs. The Commission requires providers that have an extensive portfolio of non-TRS communications offerings to adopt a cost causative method of allocating indirect corporate overhead expenses among its offerings. Because Sprint has not demonstrated that it has adopted such an allocation method, the Commission denied Sprint's request to include indirect overhead costs in the cost of IP Relay.³⁵

Sprint, as the only remaining IP Relay service provider, is required to report historical and projected costs to the Administrator on an annual basis. Reporting publicly on the Sprint cost data at this point would reveal information considered to be confidential by Sprint.

In view of the relatively stable level of IP Relay demand, Rolka Loubé recommends that the IP Relay rate continue to include the allowance for deafblind outreach activities. Because the Commission has adopted the inclusion of an operating margin rather than a return on investment when determining rates for VRS and IP CTS,

³⁴ See 2016 TRS Rate Order, 31 FCC Rcd at 7251-52, para. 19; see also 2017 TRS Rate Order, 32 FCC Rcd at 5145-46, paras. 11-13; 2018 TRS Rate Order, 33 FCC Rcd at 6304, para. 11.

³⁵ 2020 TRS Rate Order, Para 15.

Rolka Loube also recommends supplementing the IP Relay rate with an operating margin rather than a return on investment. Adding the deafblind outreach activities and the 12.35% operating margin previously selected by the Commission for operating margin to the other allowed expenses based on the average of historical 2020 and projected 2021 expenses sums to a rate of \$1.7098. However, due to the uncertainty associated with the impact of Covid-19 on demand and cost, we recommend retaining the current rate of \$1.7146 for the 2021-2022 fund year.

F. Video Relay Service Formula Development

The Commission established the current VRS reimbursement rates and the Tier structure in the Report and Order and Order (*Report and Order*) adopted and released July 6, 2017, in CG Docket No. 10-51 and 03-123 (FCC 17-86). The referenced Report and Order addressed Allowable Cost Categories, Capital Cost Recovery and Operating Margin, Rate Structure, the Tier structure and Tier levels, and related compensation matters.

The tiers which became effective in July 2017 through June 30, 2021 are shown in Table 2 below:

**Table 2: Reconfigured Rate Tiers for VRS Compensation
2017 – 2021**

Tier Numbers	Previous Tier Definition (The range of a provider’s monthly VRS minutes to which the Tier is applicable)	New Tier Definition (The range of a provider’s monthly VRS minutes to which the Tier is applicable)
Emergent		0-500,000
I	0-500,000	0-1,000,000
II	500,000.1-1,000,000	1,000,000.1 – 2,500,000
III	Over 1,000,000	Over 2,500,000

The progressive adjustment of rates for each tier is illustrated in Table 3 below, which shows the rates adopted for fund years 2017-18, 2018-19, 2019-20, and 2020-21.

Table 3: Rates Adopted for Fund Years 2017-18 through 2020-21

Per FCC 17-86	2017-2018	2018-2019	2019-2020	2020-2021
Emergent service < 500,000 minutes/month	\$5.29	\$5.29	\$5.29	\$5.29
Tier I service up to 1,000,000 minutes/month	\$4.82	\$4.82	\$4.82	\$4.82
Tier II service over 1 million up to 2,500,000 minutes/month	\$3.97	\$3.97	\$3.97	\$3.97
Tier III service over 2,500,000 minutes/month	\$3.21	\$2.83	\$2.63	\$2.63

The rates established in the Report and Order are to be applied as scheduled to all VRS providers absent further action by the Commission.

Although the Commission has adopted a four-year Tier and Rate plan, Video Relay Service providers are required to report historical and projected costs to the Administrator on an annual basis.

For analysis purposes, the Administrator segregated the provider historical and projected costs into eight distinct categories for review:

- **Facilities** - expenses associated with land and buildings, etc.;
- **CA Related Expense** - costs of the individuals performing the interpretive services;
- **Non-CA Relay Center Expense** - other costs associated with the relay center, including supervisory management, telecommunications expense, etc.;
- **Indirect Expense** - finance, human resources, legal expenses, executive compensation, etc.;

- **Depreciation Expense** - annual depreciation on facilities and equipment;
- **Marketing Expense** - projected costs of advertising the provider’s service;
- **Other Expenses** - projected expenses not directly associated with one of the other expense categories; and
- **Operating Margin** - assumed percentage within the FCC-determined “Zone of Reasonableness.”

Data submitted by the providers in response to the Administrator’s Annual Data Request are shown below. The data is summed across the providers by category and then divided by annual VRS minutes.

Table 4: VRS Service Provider Reported and Projected costs

Category	2019	2020	2021	2022	2021-2022 Average
Facilities	0.1827	0.1513	0.1579	0.1665	0.1622
CA Related	1.3884	1.3476	1.3913	1.3867	1.3890
Non-CA Relay Center	0.2849	0.22239	0.2218	0.2278	0.2248
Indirect	0.5636	0.5884	0.6210	0.6758	0.6484
Depreciation	0.0700	0.0550	0.0419	0.0483	0.0451
Marketing	0.1051	0.0901	0.1013	0.1126	0.1070
Other	0	0	0	0	0
Operating Margin	0.2595	0.2456	0.2535	0.2618	0.2577
Total Cost	2.8541	2.7020	2.7888	2.8796	2.8343

The average cost of VRS service is projected to increase \$0.0562 from the two-year historic average of \$2.7780³⁶ to \$2.8343, in the projected two-year average. CA related expenditures per minute are projected to increase from \$1.3476 in 2020 to \$1.3913 in 2021 and then decrease to \$1.3867 in 2022. Non-CA Relay Center related expenditures per minute are projected to decrease slightly from \$0.2239 in 2020 to \$0.2218 in 2021 and then increase to \$0.2278 in 2022. Indirect per minute expenditures are projected to increase from \$0.5884 in 2020 to \$0.6210 in 2021 and to \$0.6758 in 2022. The increased VRS demand in 2020, apparently due to Covid-19, resulted in the unusually low total per-minute cost of \$2.7020 in 2020.

If the Commission retains the current VRS rates and tiers for the entire 2021-2022 fund year, then, based on the industry projection of demand and cost, the operating margin for the industry will be 31.51% for the 2021-2022 fund year.

IV. Demand Projection Methodology

In order to estimate the annual funding requirement and propose a contribution factor, an estimate of the interstate funding requirement for each of the services is required. The fund requirement equals the service rate multiplied by the service demand reimbursed during the program year, July through June. The Administrator has adjusted the demand levels of the rate year to reflect the two-month difference between the provision of service and the reimbursement for that service. Providers of services being compensated using the MARS-based rate methodology, (i.e. traditional TRS, STS and CTS) are not required to submit demand projections.

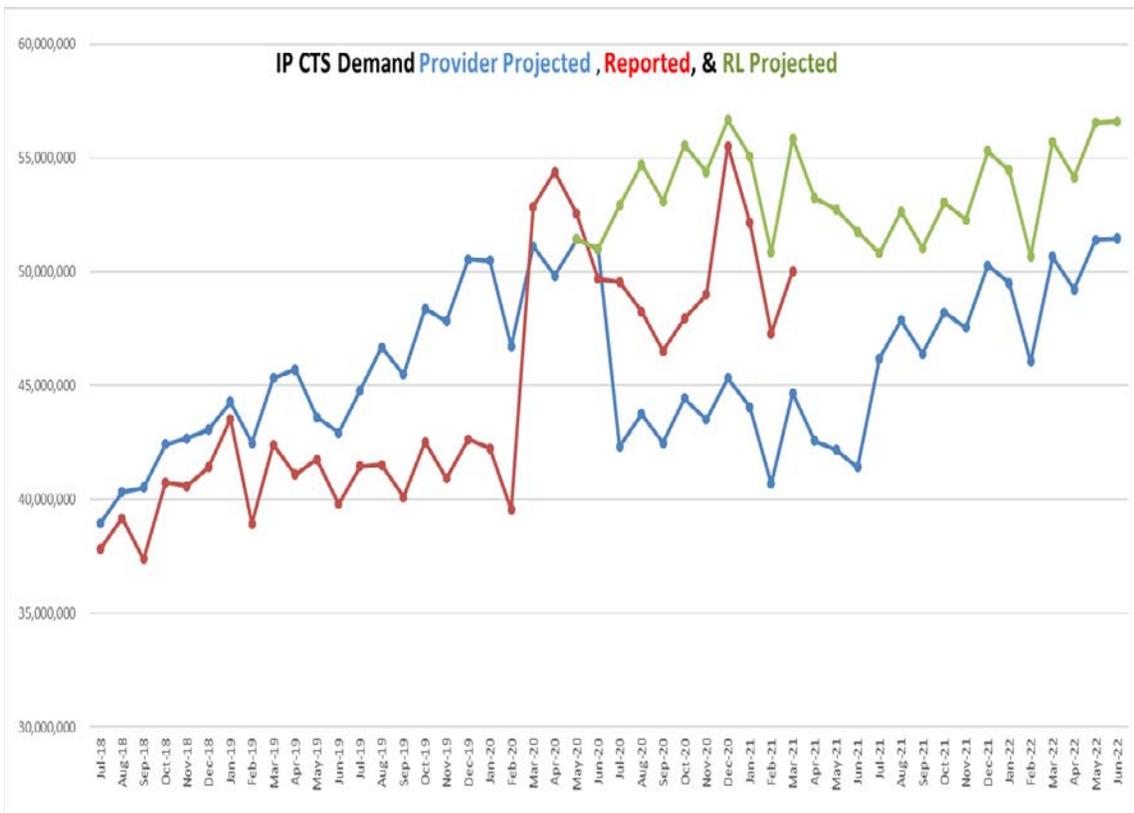
In this report, as was done previously, historical demand was used to estimate the future demand for traditional interstate TRS, STS and CTS. Using the regression data analysis tool of Microsoft Office Excel, the Administrator projected demand for the 2021-2022 fund year using actual data available to the Administrator at the time the filing is due to the Commission.³⁷ For each of these services, the Administrator projected demand and an estimated funding requirement based on the proposed compensation rates

³⁶ Fund Year costs are the average of the two historical or projected years that are part of the program year that begins July and ends June.

³⁷ In most instances this embodies July 2015 through February 2020 minutes.

for the funding year. This approach has historically provided reasonably accurate results for these services.

The Administrator has historically used the forecasts submitted by the providers for IP Relay, IP CTS and VRS services. This approach has historically provided reasonably accurate results for these services. However, the reported demand for services spiked dramatically above the projected demand for March 2020 and it is anticipated that demand will remain higher than normal for the duration of the COVID-19 pandemic. Due to the uncertain duration of the pandemic and uncertainty regarding projected demand, the Administrator has applied a 10% increase to the provider projected demand for VRS and IP CTS for the months July 2021 through June 2022 when determining the fund requirements. The following graph shows the IP CTS reported and projected demand.



The Administrator has applied the rate of \$1.30 applicable to IP CTS. Due to the uncertainty related to the impact of Covid-19 on cost and demand, Rolka Loube recommends that the IP Relay reimbursement rate remain unchanged for the 2021-2022

fund year. For the purposes of estimating the fund requirement and contribution factor, Rolka Loubé will use the existing VRS rates and tiers.

Starting in March 2020 the IP CTS industry demand increased dramatically in response to Covid-19 related demands. For over a year, IP CTS demand has been greater than industry projections. The monthly variance in IP CTS demand has also been substantial. By using a projection that was 25 percent higher than the industry projection, RL was able to collect sufficient revenue to meet the demand on fund resources. For the 2021-2022 fund year, the providers' demand forecast is 589,873,697 minutes. This forecast is higher than actual calendar year 2020 demand of 587,767,731. However, calendar year 2020 included two months that were not affected by Covid-19.

Considering the changes in actual demand and industry projections, RL recommends that for purposes of determining the 2021-2022 fund size it would be reasonable to increase the industry IP CTS projected demand by 10%. VRS demand also increased substantially due to the impact of Covid-19. For the fund year 2020-2021, RL increased the providers' demand forecast by 25%. The RL forecast has approximately matched VRS actual demand for the fund year 2020-2021. The VRS providers' 2021-2022 fund year projection is 158,906,933 minutes. This estimate is slightly lower than actual calendar 2020 minutes of 162,162,404 but is higher than actual calendar year 2019 minutes of 132,849,263. Considering the changes in actual demand and industry projections, RL recommends that for purposes of determining the 2021-2022 fund size it would be reasonable to increase the industry VRS projected demand by 10%.

V. Additional Funding Requirements

A. National Deaf-Blind Equipment Distribution Program

In its August 4, 2016 Order,³⁸ the Commission permanently established a National Deaf-Blind Equipment Distribution Program (NDBEDP) to certify and provide reimbursement to entities in each state so that they can distribute specialized CPE to

³⁸ See FCC 16-101 adopted August 4, 2016, Rel. August 5, 2016.

low-income individuals who are deafblind.³⁹ Funding for this program has been established at \$10,000,000 per year. As such, \$10,000,000 has been included in the Interstate TRS funding requirement for the 2021-2022 fund year.

Allowances for ongoing VRS reforms, database administration, fund administration, data collection agent costs, TRS Fund Advisory Council expense, audits of service providers, an independent financial audit of the fund, bankruptcy representation, the development and implementation of an IPERIA audit plan approved by the OMB, and identity validation costs totaling \$22,000,000 are included as other TRS Fund administration costs.

VI. Contribution Factor Calculation

As previously noted, reimbursement requests are to be processed within sixty (60) days of receipt by the Administrator. Operationally, service provided in May will be reported to the Administrator in June and paid in July, the first month of the upcoming program year. Similarly, service provided in June will be reported in July and paid in August, the second month of the upcoming program year. To accurately account for this lag, the Administrator's funding recommendation for the fund year from July 2021 through June 2022 reflects the demand for the May 2021 - April 2022 time period. The Administrator has recommended that the payment reserve incorporate a two-month accrual for anticipated provider distributions that will be paid in the following year (i.e. May 2022 and June 2022 paid respectively in July 2022 and August 2022).

Collectively, anticipated expenditures for the six relay services and the additional fund requirements total \$1,735,674,049. Interest on invested funds for the July 2021-June 2022 period is projected to be zero and is no longer available to be subtracted as an offset from these projected fund requirements in calculating the 2021-2022 budget.

Historically, the Administrator has recommended that the TRS Fund include an additional component to protect the Interstate TRS program from running short of

³⁹ *Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, Section 105, Relay Services for Deaf-Blind Individuals*, Report and Order, CG Docket No. 10-210, Adopted April 4, 2011.

available funds before the end of the TRS Fund year. In its 2009 and 2010 Rate Orders, the Commission accepted the Administrator's recommendation to include a surplus of one month's projected distributions to providers.⁴⁰ The Administrator recommended for the 2014-2015 funding year that the budgetary reserve be increased to two months. The reserve is a reasonable precautionary measure to guard against the possibility of unanticipated demand for TRS that can unexpectedly increase the need to fund payments during the course of a fund year. In the 2014-2015 Rate Order,⁴¹ the Commission accepted the change to increase the reserve as described. The use of a budgetary reserve of two months of projected distributions to providers is comprised of a reserve attributable to projected May and June 2022 IP CTS service in the amount of \$148,494,616 and a reserve attributable to all other projected TRS and IP-based Services for May and June 2022 in the amount of \$101,232,537 for a combined total reserve of \$249.7 million. It is anticipated that there will be a surplus of approximately \$411 million on June 30, 2021, which is deducted from the funding requirement when determining the contribution factor.

The total projected net funding requirement for the 2021-2022 funding year is estimated to be \$1,324,674,049. The component parts of the projected funding requirement are displayed in Exhibit 2.

Based on the 2021-2022 demand projections and the proposed rates contained herein, coupled with the anticipated calendar-year 2020 revenue bases, the Administrator estimates that the contribution factors are 0.01330 for non-IP CTS TRS services and 0.00830 for IP CTS services.

⁴⁰ Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Order, CG Docket No. 03-123, 23 FCC Rcd 9976 (2008 Rate Order) at n.56.

⁴¹ See DA 14-946, para. 23.

VII. Program Administration

A. Interstate TRS Fund Advisory Council Reports

Pursuant to section 64.604 of the Commission's rules, the Advisory Council (Council) offers recommendations to the Administrator regarding interstate TRS cost-recovery matters.⁴² The Advisory Council includes non-paid volunteers from the hearing and speech disability community, TRS users (voice and text telephone), state regulators and relay administrators, interstate service providers, and TRS providers. Appendix C contains a listing of current Advisory Council members.

On September 14, 2020, the Advisory Council met via Zoom conference rather than in-person. The meeting included an extensive overview of developments at the FCC presented by Eliot Greenwald, Deputy Chief, Disability Rights Office (DRO) of the FCC and a discussion of the Health of the Fund by the Administrator, Rolka Loube. The Council members expressed interest in matters relating to the establishment of a deafblind subcommittee. During the new business portion of the meeting the Council established a new subcommittee to identify deafblind issues specifically related to the TRS fund. The Council also continued interest in the work of a subcommittee that, subject to non-disclosure agreements with the service providers, will once again have access to the service provider annual cost and demand submissions to the Administrator.

The method and sequence of conducting the spring 2021 meetings of the TRS Fund Advisory Council have been modified from the traditional practices in deference to the social distancing practices in place during the current health pandemic. On April 15, 2021, the Council conducted an abbreviated virtual meeting, via Zoom, in lieu of an in-person meeting. The meeting was scheduled to be held virtually due to the governmental limitations recommended in response to the COVID-19 pandemic. All but one member with a scheduling conflict were able to participate, and members of the public were also able to attend the virtual proceedings. The virtual meeting included an overview of developments at the FCC, presented by Eliot Greenwald, Deputy Chief, Disability Rights Office (DRO) and Michael Scott, an attorney in the DRO. An overview of the

⁴² 47 C.F.R. § 64.604 (c)(5)(iii)(H).

administrator's draft findings to be submitted to the FCC was presented by Robert Loube and Amanda Coby of Rolka Loube. The topics addressed included compensation rates, demand projections and contribution factors, based on the annual data collection from state programs and from certified service providers applicable to the fund year beginning July 1, 2021. The minutes of the September 2020 and the April 2021 meetings were not available in time for this submission but are anticipated to be available for submission to the Commission during the anticipated comment period on this Annual Report recommendation.

Rolka Loube would like to also acknowledge the contributions of Commissioner Sarah Hoffmann of the Vermont Public Service Commission for her active participation as a member of the Advisory Council as well as a member of the Cost subcommittee who had access to the service provider confidential data submissions. Commissioner Hoffmann's seat on the Council has recently been filled by the NARUC nomination of Commissioner Andrew Fay of the Florida Public Service Commission to a term beginning April 2021.

B. Audit Report

Included in Appendix E is a copy of the TRS Fund Performance Status comparing the projected budgetary levels for the current program year with the actual results of operations for the period July 2020 through March 2021.

Exhibits:

- Exhibit 1-1** Displays TRS & STS data collected from states for the Interstate MARS rate calculation.
- Exhibit 1-2** Displays CTS data collected from states for the Interstate MARS rate calculation.
- Exhibit 1-3** IP CTS CA cost trend data.
- Exhibit 1-5** VRS Operating Margin for Tariff Year 2021-2022
- Exhibit 2** Displays the proposed Interstate TRS Fund Size and Contribution Factor for the July 2021 through June 2022 Fund Year.

Exhibit 1.1

TTY					STS					Combined TTY + STS	
Rate	Conversation Minutes	Session Minutes	Session or Conversation Minutes	Revenue	Rate	Conversation Minutes	Session Minutes	Session or Conversation Minutes	Revenue	Conversation Minutes	Revenue
\$ 0.87	17,036	56,319		\$ 14,856.69	\$ 0.87	107	259		\$ 93.31	63,756	\$ 191,558.40
\$ 1.05	19,547	58,526	S	\$ 61,452.30	\$ 1.05	1,457	2,158	S	\$ 2,265.90	13,480	\$ 59,398.35
\$ 1.33	22,758	52,715	C	\$ 30,268.14	\$ 1.33	1,913	5,400	C	\$ 2,544.29	28,614	\$ 59,231.25
\$ 1.35	402,912	1,026,447	S	\$ 1,385,703.45	\$ 1.35	23,060	39,632	S	\$ 53,503.20	36,986	\$ 59,150.00
\$ 1.35	163,267	318,580	S	\$ 430,083.00	\$ 1.35	4,538	8,043	S	\$ 10,858.05	28,065	\$ 74,372.25
\$ 1.39	21,401	42,253	S	\$ 58,731.67	\$ 1.39	2,301	3,398	S	\$ 4,723.22	185,504	\$ 759,196.78
\$ 1.42	9,694	26,200	S	\$ 37,204.00	\$ 1.42	2	17	S	\$ 24.14	450,555	\$ 2,041,032.10
\$ 1.42	15,033	36,485	C	\$ 21,346.86	\$ 1.42	1,221	3,621	C	\$ 1,733.82	25,087	\$ 74,084.68
\$ 1.45	2,307	4,654	C	\$ 3,345.15	\$ 1.45	4	17	C	\$ 5.80	13,259	\$ 151,100.00
\$ 1.55	2,792	5,960	C	\$ 4,327.60	\$ 1.55	-	1	C	\$ -	105,947	\$ 283,855.00
\$ 1.60	36,852	91,483		\$ 58,935.35	\$ 1.60	134	768		\$ 214.65	11,459	\$ 63,600.00
\$ 1.60	63,491	118,848	S	\$ 190,156.80	\$ 1.60	265	876	S	\$ 1,401.60	425,972	\$ 1,439,206.65
\$ 1.60	4,969	10,979	S	\$ 17,566.40	\$ 1.60	137	480	S	\$ 768.00	31,902	\$ 153,908.00
\$ 1.65	13,480	35,975	S	\$ 59,358.75	\$ 1.65	-	24	S	\$ 39.60	13,982	\$ 654,000.00
\$ 1.75	10,088	27,391	S	\$ 47,934.25	\$ 1.75	11	39	S	\$ 68.25	7,254	\$ 40,252.00
\$ 1.85	156,461	287,604	S	\$ 532,067.40	\$ 1.85	310	557	S	\$ 1,030.45	171,957	\$ 513,000.00
\$ 1.85	337	680	C	\$ 623.45	\$ 1.85	-	-	C	\$ -	37,375	\$ 93,437.50
\$ 1.88	30,771	80,049	S	\$ 150,492.12	\$ 1.88	1,131	1,817	S	\$ 3,415.96	9,826	\$ 28,298.88
\$ 1.88	62,724	219,043	C	\$ 117,921.12	\$ 1.88	242	477	C	\$ 454.96	63,615	\$ 213,110.25
\$ 1.90	55,179	105,535	S	\$ 200,516.50	\$ 1.90	546	1,274	S	\$ 2,420.60	36,383	\$ 230,373.60
\$ 1.91	15,692	27,012		\$ 29,968.19	\$ 1.91	645	1,018		\$ 1,231.81	55,725	\$ 202,937.10
\$ 1.93	3,023	8,892	C	\$ 5,834.39	\$ 1.93	-	63	C	\$ -	1,864	\$ 5,219.20
\$ 1.94	20,590	37,168	S	\$ 72,105.92	\$ 1.94	223	538	S	\$ 1,043.72	33,860	\$ 118,510.00
\$ 1.97	40,635	75,757	S	\$ 149,241.29	\$ 1.97	2,923	3,913	S	\$ 7,708.61	16,337	\$ 31,200.00
\$ 2.00	7,220	18,761	S	\$ 37,522.00	\$ 2.00	34	1,365	S	\$ 2,730.00	19,556	\$ 178,373.99
\$ 2.07	28,460	88,433	C	\$ 58,912.20	\$ 2.07	154	356	C	\$ 319.05	88,169	\$ 1,294,807.61
\$ 2.08	233,140	599,048	C	\$ 484,931.20	\$ 2.08	11,362	27,235	C	\$ 23,632.96	180,957	\$ 629,730.36
\$ 2.08	31,640	71,447	C	\$ 65,811.20	\$ 2.08	933	1,764	C	\$ 1,940.64	69,345	\$ 230,885.40
\$ 2.08	3,760	21,056	S	\$ 43,796.48	\$ 2.08	1	61	S	\$ 126.88	59,789	\$ 196,870.05
\$ 2.10	13,702	23,247	S	\$ 48,818.70	\$ 2.10	19	96	S	\$ 201.60	84,040	\$ 181,526.40
\$ 2.15	231,126	496,770	C	\$ 496,920.90	\$ 2.15	7,495	23,203	C	\$ 16,114.25	21,004	\$ 63,718.20
\$ 2.16	80,744	102,013	C	\$ 174,407.04	\$ 2.16	3,296	6,773	C	\$ 7,119.36	23,702	\$ 63,454.89
\$ 2.18	2,475	3,657	S	\$ 7,972.26	\$ 2.18	-	9	S	\$ 19.62	62,966	\$ 118,376.08
\$ 2.19	52,614	78,632	S	\$ 172,204.08	\$ 2.19	7,175	11,263	S	\$ 24,665.97	2,475	\$ 7,991.88
\$ 2.20	10,555	20,293	S	\$ 44,644.60	\$ 2.20	56	201	S	\$ 442.20	13,126	\$ 49,564.48
\$ 2.24	13,103	21,964	S	\$ 49,199.36	\$ 2.24	23	163	S	\$ 365.12	11,077	\$ 37,551.03
\$ 2.25	49,069	100,441	S	\$ 225,992.25	\$ 2.25	12	59	S	\$ 132.75	49,081	\$ 226,125.00
\$ 2.37	50,555	74,269	S	\$ 176,017.53	\$ 2.37	18,790	23,151	S	\$ 54,867.87	9,696	\$ 37,228.14
\$ 2.37	178,151	657,462	C	\$ 422,217.87	\$ 2.37	2,625	5,754	C	\$ 6,221.25	1,414	\$ 4,750.00

Exhibit 1.1 cont											
\$ 2.40	33,146	91,240	S	\$ 218,976.00	\$ 2.40	3,237	4,749	S	\$ 11,397.60	130,181	\$ 816,882.95
\$ 2.50	36,318	108,791	C	\$ 90,795.00	\$ 2.50	1,057	2,093	C	\$ 2,642.50	13,721	\$ 49,020.30
\$ 2.50	55,894	128,356	C	\$ 320,890.00	\$ 2.50	29,642	43,328	S	\$ 108,320.00	10,611	\$ 45,086.80
\$ 2.55	31,369	80,394	S	\$ 205,004.70	\$ 2.55	18,563	25,860	S	\$ 65,943.00	244,502	\$ 508,564.16
\$ 2.65	28,020	57,335	C	\$ 74,253.00	\$ 2.65	45	105	C	\$ 119.25	238,621	\$ 513,035.15
\$ 2.68	105,947	156,945	S	\$ 283,855.00	\$ 2.80	163	421	C	\$ 456.40	82,520	\$ 756,000.00
\$ 2.80	1,701	3,340	C	\$ 4,762.80	\$ 2.88	3	15	C	\$ 8.64	17,036	\$ 82,500.00
\$ 2.88	9,823	33,158	C	\$ 28,290.24	\$ 2.92	11,917	33,260	C	\$ 34,797.64	167,805	\$ 440,941.05
\$ 2.92	48,474	152,794	C	\$ 141,544.08	\$ 2.95	221	309	S	\$ 652.64	32,573	\$ 67,751.84
\$ 2.95	24,866	132,860	S	\$ 73,432.04	\$ 2.98	5,996	12,930	S	\$ 17,887.89	24,671	\$ 32,812.43
\$ 2.98	165,961	346,465	S	\$ 495,112.11	\$ 2.99	2,161	3,802	S	\$ 11,367.98	16,254	\$ 23,080.68
\$ 2.99	128,020	269,403	S	\$ 805,514.97	\$ 3.09	3,324	4,808	C	\$ 10,271.16	156,771	\$ 533,097.85
\$ 3.09	39,580	74,588	C	\$ 122,302.20	\$ 3.09	13,766	26,460	C	\$ 45,427.80	5,794	\$ 98,004.00
\$ 3.30	54,927	139,126	C	\$ 181,259.10	\$ 3.35	64	105	C	\$ 214.40	5,378	\$ 125,000.00
\$ 3.35	63,551	97,097	C	\$ 212,895.85	\$ 3.36	1	8	S	\$ 3.36	43,992	\$ 189,600.00
\$ 3.36	1,413	3,020	S	\$ 4,746.84	\$ 3.39	77	155	C	\$ 261.03	5,106	\$ 18,334.40
\$ 3.39	11,000	36,837	C	\$ 37,290.00	\$ 3.48	32,813	43,474	C	\$ 114,189.24	60,391	\$ 176,341.72
\$ 3.46	168,012	321,945	C	\$ 581,322.94	\$ 3.50	3,895	10,036	C	\$ 13,632.50	180,776	\$ 428,439.12
\$ 3.48	148,144	281,892	C	\$ 515,541.12	\$ 3.64	296	565	C	\$ 1,077.44	17,143	\$ 14,950.00
\$ 3.50	29,965	77,470	C	\$ 104,877.50	\$ 3.99	1,213	5,217	S	\$ 20,813.99	4	\$ 27,600.00
\$ 3.63	382,850	790,963	C	\$ 1,389,745.72	\$ 4.31	7,581	16,390	S	\$ 32,673.16	20,813	\$ 73,149.64
\$ 3.64	16,146	24,651	C	\$ 58,771.44	\$ 4.99	17,492	35,646	S	\$ 177,873.84	16,442	\$ 59,848.88
\$ 3.99	18,343	39,489	S	\$ 157,559.99	\$ 5.49	67,705	118,631	S	\$ 651,286.39	2,311	\$ 3,350.95
\$ 4.31	36,411	70,199	S	\$ 156,926.84	\$ 6.92	2,965	14,107	S	\$ 97,622.38	2,792	\$ 4,327.60
\$ 4.84	17,036	38,089	S	\$ 82,500.00	\$ 9.16	3,752	9,846	S	\$ 34,373.63	85,536	\$ 429,210.00
\$ 5.55	11,459	34,332	S	\$ 63,600.00	\$ 11.40	230	356	S	\$ 2,621.09	49,932	\$ 270,947.70
\$ 6.42	85,204	186,477	S	\$ 1,197,185.23	\$ 16.91	3	1,384	S	\$ 50.74	3,761	\$ 43,923.36
\$ 9.16	78,768	169,216	S	\$ 721,626.37	\$ 23.24	78	222	S	\$ 1,812.94	42,904	\$ 132,573.36
\$ 11.40	13,029	60,227	S	\$ 148,478.91	\$ 46.77	5,501	12,010	S	\$ 257,306.11	43,558	\$ 156,949.90
\$ 16.91	5,791	36,017	S	\$ 97,953.26						10,099	\$ 48,002.50
\$ 23.24	5,300	17,575	S	\$ 123,187.06						68,693	\$ 226,686.90
\$ 46.77	8,481	32,752	S	\$ 396,693.89						337	\$ 13,811.45
#####	4	3,099	S	\$ 27,600.00						3,023	\$ 5,834.39
Totals	4,042,306	9,228,190		\$ 15,313,902.46	Totals	326,906	602,305		\$ 1,949,554.19	4,369,212	\$17,276,644.65

Additional Costs Paid To Providers	\$ 974,910.13	Additional Costs Paid To Providers	\$ 74,880.17	Additional Costs Paid To Providers	\$ 1,049,790.30
Total Costs	\$ 16,288,812.60	Total Costs	\$ 2,024,434.36	Total Costs	\$18,326,434.96
Rate	\$ 4.0296	Rate	\$ 6.1927	Rate	\$ 4.1944
				+ STS Outreach	\$ 5,325.45

Flat Rate State With Implicate Rate Calculation Shown

Exhibit 1.2

CTS					
Rate	Conversation Minutes	Session Minutes	Session or Conversation Minutes		Revenue
\$ 1.02	3,430	3,742			\$ 3,500.00
\$ 1.63	84,873	95,018	S		\$ 154,879.34
\$ 1.65	33,501	37,494	S		\$ 61,865.10
\$ 1.67	186,054	217,308	S		\$ 362,904.36
\$ 1.69	367,389	426,825	S		\$ 721,334.25
\$ 1.69	54,359	64,391	S		\$ 108,820.79
\$ 1.69	249,356	294,252	S		\$ 497,285.88
\$ 1.70	30,267	35,960			\$ 51,550.00
\$ 1.72	95,601	11,479	S		\$ 19,743.88
\$ 1.72	4,153	5,047	S		\$ 8,680.84
\$ 1.73	454	8,245	S		\$ 14,263.85
\$ 1.74	596	9,844	S		\$ 17,128.56
\$ 1.76	22,503	27,551	S		\$ 48,489.76
\$ 1.76	463,835	542,139	S		\$ 954,164.64
\$ 1.77	45,932	57,187	S		\$ 101,220.99
\$ 1.78	70,110	82,120	S		\$ 146,173.60
\$ 1.78	50,701	59,961	S		\$ 106,730.58
\$ 1.78	29,848	35,010	S		\$ 62,317.80
\$ 1.78	14,373	16,396	S		\$ 29,184.88
\$ 1.80	67,024	78,538	S		\$ 141,368.40
\$ 1.81	28,613	34,123	S		\$ 61,762.63
\$ 1.81	181,384	213,944	S		\$ 387,238.64
\$ 1.82	61,994	72,638	S		\$ 132,201.16
\$ 1.84	31,257	36,543	S		\$ 67,239.12
\$ 1.84	2,126	3,260	S		\$ 5,998.40
\$ 1.85	4,649	6,294	S		\$ 11,643.90
\$ 1.85	100,313	118,174	S		\$ 218,621.90
\$ 1.85	61,862	72,447	S		\$ 134,026.95
\$ 1.85	470,475	557,545	S		\$ 1,031,458.25
\$ 1.90	136,060	158,259	C		\$ 258,514.00
\$ 1.91	45,469	55,545	S		\$ 106,090.95
\$ 1.91	277,647	323,358	C		\$ 530,305.77
\$ 1.94	26,021	30,279	C		\$ 50,480.74
\$ 1.95	108,061	123,157	C		\$ 210,718.95
\$ 1.96	39,651	48,640	C		\$ 77,715.96
\$ 1.97	377,882	450,297	C		\$ 744,427.54
\$ 1.98	20,885	27,262	C		\$ 41,352.30
\$ 1.98	282,792	324,248	C		\$ 559,928.16
\$ 1.98	222,900	254,763	S		\$ 504,430.74

Exhibit 1.2 cont					
\$	1.99	81,400	92,132	C	\$ 161,986.00
\$	2.00	9,939	11,848	S	\$ 23,696.00
\$	2.01	122,638	140,022	C	\$ 246,502.38
\$	2.01	90,607	104,159	S	\$ 209,359.59
\$	2.03	304,787	351,693	C	\$ 618,717.61
\$	2.03	21,621	24,511	C	\$ 43,890.63
\$	2.03	659	906	C	\$ 1,337.77
\$	2.05	206,143	206,143	C	\$ 422,593.15
\$	2.06	422,672	472,992	C	\$ 870,704.32
\$	2.08	83,032	94,128	C	\$ 172,706.56
\$	2.08	15,946	18,307	C	\$ 33,167.68
\$	2.08	247,605	297,573	S	\$ 618,951.84
\$	2.08	513,186	569,609	C	\$ 1,067,426.88
\$	2.08	10,002	13,381	C	\$ 20,804.16
\$	2.12	79,273	94,051	C	\$ 168,058.76
\$	2.15	3,356	4,370	S	\$ 9,395.50
\$	2.15	11,365	12,924	C	\$ 24,434.75
\$	2.16	58,915	73,575	C	\$ 127,256.40
\$	2.23	275,855	320,302	C	\$ 615,156.65
\$	2.25	74,781	90,694	C	\$ 168,257.25
\$	2.25	92,859	106,428	C	\$ 208,932.75
\$	2.30	35,141	41,218	C	\$ 80,824.30
\$	2.33	37,329	43,188	C	\$ 86,976.57
\$	2.40	128,862	147,434	C	\$ 309,268.80
\$	2.40	87,785	107,998	S	\$ 259,195.20
\$	2.50	27,262	33,854		\$ 68,250.00
\$	2.50	47,868	55,269		\$ 119,850.00
\$	2.63	40,127	46,678		\$ 105,600.00
\$	2.73	20,020	24,187	S	\$ 66,031.27
\$	2.93	216,916	255,224	C	\$ 635,563.18
\$	2.95	53,779	61,712		\$ 158,815.32
\$	2.99	513,585	605,389	C	\$ 1,535,618.01
\$	3.02	194,110	230,401	S	\$ 695,811.02
\$	3.21	118,281	138,745	S	\$ 445,369.85
\$	5.04	6,668	7,619		\$ 33,600.00
Totals		8,608,773	9,917,948		\$ 19,179,873.71

Additional Costs Paid To Providers					\$ 1,190,036.15
Total Costs					\$ 20,369,909.86
Rate					\$ 2.3662

Flat Rate State With Implicate Rate Calculation Shown

Exhibit 1.3

IP CTS CA Cost Trend Data							
Category	Historic					Projected	
	2016	2017	2018	2019	2020	2021	2022
Facilities	\$ 0.0322	\$0.0253	\$ 0.0230	0.0222	0.0193	0.0257	0.0288
CA Related	\$ 0.2674	\$0.2773	\$ 0.2725	0.2560	0.2454	0.2719	0.2604
Non -CA Related	\$ 0.0487	\$ 0.0500	\$ 0.0520	0.0486	0.0433	0.0450	0.0444
Indirect	\$ 0.1521	\$0.1478	\$ 0.1836	0.1627	0.1589	0.1810	0.1786
Depreciation	\$ 0.0276	\$0.0254	\$ 0.0253	0.0282	0.0225	0.0187	0.0252
Marketing	\$ 0.0757	\$0.0863	\$ 0.0811	0.0645	0.0512	0.0572	0.0592
Outreach	\$ 0.0669	\$0.0465	\$ 0.0339	0.0372	0.0032	0.0040	0.0047
Other	\$ 0.5986	\$0.5730	\$ 0.5437	0.4990	0.4570	0.4078	0.4183
Return	\$ 0.0106						
Operation Margin		\$ 0.1232	\$ 0.1215	\$ 0.1118	\$ 0.1001	\$ 0.1011	\$ 0.1019
Total Cost	\$ 1.2798	\$ 1.3548	\$ 1.3367	\$ 1.2302	\$ 1.1010	\$ 1.1124	\$ 1.1214
CA & Other Related	\$ 0.8660	\$ 0.8503	\$ 0.8162	\$ 0.7550	\$ 0.7023	\$ 0.6797	\$ 0.6786
All Other	\$ 0.4138	\$ 0.5045	\$ 0.5205	\$ 0.4752	\$ 0.3986	\$ 0.4327	\$ 0.4428
Total:	\$ 1.2798	\$ 1.3548	\$ 1.3367	\$ 1.2302	\$ 1.1010	\$ 1.1124	\$ 1.1214

VRS Operating Margin Estimates for Tariff Year (July-June) 2021-2022					
Calculated using the current Rates and Tiers					
Provider	Demand	Revenue	Gross Margin	Expenses	Operating Margin
ASL/Global					
Covno					
ZP Better Together					
Sorenson					
Total	158,906,933	\$ 539,057,619	\$ 129,160,905	\$ 409,896,713	31.51%

Exhibit 2									
PROJECTED 2021-2022	Methodology	Prior Year Deaf Balance	Prior Year Rate	Projected Budget Year Deaf	Projected Rate	Two Month Reserve Deaf	Two Month Reserve Rate	Fund Requirement	Two Month Reserve
Traditional TRS	MARS	284,056 \$	3.7526	1,074,422 \$	4.1944	207,391	4.1944	5,497,463	863,881
Speech to Speech	MARS	28,263 \$	3.7526	108,469	4.1944	21,698	4.1944	561,104	30,000
STS outreach		28,263 \$	1.1310	108,469	1.1310	21,698	1.1310	154,868	24,540
Caption Telephone	MARS	423,152 \$	2.3153	1,905,611	2.3662	361,263	2.3662	5,468,781	854,821
Subtotal MARS:								\$ 11,702,005	\$ 1,840,252
IP Relay	DA 20-692	1,373,708 \$	1.7146	5,572,843	1.7146	1,084,753	1.7146	\$ 11,910,556	\$ 1,859,917
Subtotal IP Relay:								\$ 11,910,556	\$ 1,859,917
Emergent Tier	FCC 17-86	1,089,339 \$	5.2900	5,277,692	45.29	1,059,333	45.29	33,661,593	5,603,871
Tier 1	FCC 17-86	4,086,400 \$	4.8200	21,931,867	44.82	4,454,953	44.82	125,465,868	21,472,875
Tier 2	FCC 17-86	6,000,000 \$	3.9700	30,000,000	43.97	6,000,000	43.97	142,920,000	23,820,000
Tier 3	FCC 17-86	17,077,654 \$	2.6300	88,341,605	42.63	17,732,176	42.63	277,252,651	46,635,622
Subtotal VRS:								\$ 579,320,133	\$ 97,532,368
Non IP CTS Projected Provider Payments								\$ 602,932,693	\$ 101,232,537
Subtotal:								\$ 704,165,230	
IP Caption Telephone	FCC 18-79	109,851,713 \$	1.4200	534,634,438	1.3000	114,226,628	1.3000	851,014,202	148,494,616
IP CTS Projected Provider Payments								\$ 851,014,202	\$ 148,494,616
Subtotal:								\$ 999,508,819	
Grand Total Service Requirements:								\$ 1,453,946,896	\$ 249,727,153
Two Month Non IP CTS Percentage								40.54%	
Two Month IP CTS Percentage								59.46%	
Deaf Blind Equipment Distribution Program								\$ 10,000,000	Non IP CTS
All other TRS Fund Administration costs								\$ 4,053,726	5,946,274
Subtotal:								\$ 22,000,000	8,918,996
Grand Total Service Requirements:								\$ 32,000,000	12,971,922
estimated fund balance at 6/30/2021								\$ 1,735,674,049	166,608,125
Non IP CTS Requirement								\$ 717,197,162	
Net Non IP CTS Requirement								\$ 550,529,028	
IP CTS Requirement								\$ 1,018,536,696	
Net IP CTS Requirement								\$ 774,145,021	
Net Requirement								\$ 1,324,674,049	
estimated non-IP CTS requirements								\$ 550,529,028	
* estimated non-IP CTS contribution base								\$ 41,382,719,812	
Contribution factor non-IP CTS								0.01330	
estimated IP CTS requirements								\$ 774,145,021	
** estimated IP CTS contribution base								\$ 99,247,287,860	
Contribution factor IP CTS								0.00830	

* based on data reported by USAC updated through 4/2021
 ** based on data reported by USAC updated through 4/2021